**CPM-65 BIOS.COM Documentation**

**Program description**

BIOS.COM is the Basic I/O System of CPM-65. It is as such the low level module of CPM-65 performing standardized access operations to hardware components and hardware dependent system operations. It is thus the hardware abstraction layer for CPM-65. It is typically only accessed by the BDOS. User access should go through the BDOS function BIOS-Call ($1A)

The BIOS also contains a CPM-65 IRQ handler, because the ROM IRQ handler needs and modifies page zero cells used by the CPM-65 software

This document is work in progress and will be expanded over time

**Usage**

BIOS is called via a JMP list beginning at its fixed memory address. In the case of the JC-][ this address is $D800.

All BIOS functions can receive or send a single byte as argument in the Accu

If the command was executed successfully, BIOS returns the carry flag as clear.

If an error occurs, carry is set and an error number is in A. The BDOS or the user program has to take all error handling for maximum flexibility.

**BIOS Functions**

**BIOS Function $00 Cold BOOT**

**BIOS Function $01 Warm BOOT**

**BIOS Function $02 Get Console Status**

**BIOS Function $03 Get CHR from STDIN**

**BIOS Function $04 Output CHR trough STDOUT**

**BIOS Function $05 not implemented**

**BIOS Function $06 not implemented**

**BIOS Function $07 not implemented**

**BIOS Function $08 not implemented**

**BIOS Function $09 Select disc**

**BIOS Function $0A not implemented**

**BIOS Function $0B Set Sector**

**BIOS Function $0C Read Sector**

**BIOS Function $0D WriteSector**

**BIOS Function $0E not implemented**

**BIOS Function $0F Get BIOS VERSION**

Returns the version nr of the BIOS as Byte

Bits 7…4 main version nr

Bits 3…0 sub version

**BIOS Function $10 ROM Monitor**

Jump to ROM monitor at $E000

**BIOS Function $11 Mount Disk Image**

The calling program has to send in A a pointer to a zero page cell containing the command

Command structure

Byte 1 Bit 7 unmount drive

Bit 6 report LBA of mounted drive in bytes 2..5, if bit 7 is set, the drive will be dismounted and nothing will be reported

Bit 5…0 drive nr, currently only 0..3 allowed

Byte 2..5 4 bytes LBA address of the 1. Block of the image

**BIOS Function $12 Read RTC Clock**

This function reads the current time from the RTC.

The time is in A/X/Y = hh/mm/ss. Values are in hex.

**BIOS Function $13 Acess Device Command Channel**

The calling program has to send in A a pointer to a zero page cell containing the command

Command structure

Byte 1 channel selector 0 = std print command 1 = opened device command

Byte 2 Byte transferred in A

Byte 3 Byte transferred in X

Byte 4 Byte transferred in Y

**BIOS Function $0x**